



US005958057A

United States Patent [19]
Gianni

[11] **Patent Number:** **5,958,057**
[45] **Date of Patent:** **Sep. 28, 1999**

[54] **METHOD AND APPARATUS FOR POWERING-ON A COMPUTER-BASED SYSTEM VIA A NETWORK INTERFACE**

| | | | | |
|-----------|--------|------------------|-------|---------|
| 5,121,500 | 6/1992 | Arlington et al. | | 395/750 |
| 5,121,506 | 6/1992 | Arlington et al. | | 395/750 |
| 5,381,414 | 1/1995 | Gibson | | 395/750 |
| 5,396,636 | 3/1995 | Gallagher et al. | | 395/750 |
| 5,535,400 | 7/1996 | Belmont | | 395/750 |

[75] Inventor: **Robert R. Gianni**, San Jose, Calif.

[73] Assignee: **Sun Microsystems, Inc.**, Mountain View, Calif.

[21] Appl. No.: **09/152,634**

[22] Filed: **Sep. 14, 1998**

Related U.S. Application Data

[63] Continuation of application No. 08/499,085, Jul. 6, 1995, Pat. No. 5,809,313.

[51] Int. Cl.⁶ **G06F 1/26**

[52] U.S. Cl. **713/310; 713/300**

[58] Field of Search **395/750.01-750.08, 395/750**

[56] **References Cited**

U.S. PATENT DOCUMENTS

4,635,195 1/1987 Jeppesen, II et al. 395/750

4,663,539 5/1987 Sharp et al. 395/750

4,663,563 5/1987 Sharp et al. 307/38

4,677,566 6/1987 Whittaker et al. 395/750

4,747,041 5/1988 Engel et al. 395/750

5,012,233 4/1991 Paulsen, Jr. 395/750

FOREIGN PATENT DOCUMENTS

92302925 4/1992 European Pat. Off. .

92305570 6/1992 European Pat. Off. .

93304075 5/1993 European Pat. Off. .

Primary Examiner—Ayaz R. Sheikh

Assistant Examiner—David Wiley

Attorney, Agent, or Firm—Flehr Hohbach Test Albritton & Herbert LLP

[57] **ABSTRACT**

A network interface card in a networked client computer includes a network interface circuit that decodes and then compares incoming network packet addresses to known address bit patterns, the decoding and comparing circuitry being powered at all times. Receipt and recognition of certain addresses means the client computer must be powered-on, even if manually switched OFF. When such a server-transmitted address is recognized, a power-on signal is issued to a power control unit that causes full operating power to be coupled to the client computer. In this fashion, a server can broadcast power-on signals to a plurality of networked client computers or workstations.

20 Claims, 3 Drawing Sheets

